

INSTRUCTIONAL PACKAGE

HRT 255 Urban Tree Care

Effective Term Spring 2023

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Departmental Mission Statement:

Forestry Management Technology Department & Program Mission Statement

The mission of the Department, the Programs and its faculty is to support the broader College's goals as detailed above, but also provide a comprehensive silviculturally based environmental education that recognizes the broad multiple uses demanded from the forest environments of South Carolina, the Southeastern United States and the nation.

- We want our graduates to recognize how their daily decisions will have a lasting impact on the social, cultural, economic, and environment fabric of our state, region and country.
- Their natural resource decision making process must be based on the highest professional and ethical standards for the long term protection and promotion of a high demand resource.
- We strive to prepare well trained forest, wildlife and natural resource technicians for both public and private sector employers and promote career opportunities for our graduates.

Part I: Course Information

Effective Term: Spring 2023

COURSE PREFIX: HRT 255

COURSE TITLE: Urban Tree Care

CONTACT HOURS: 2.0 Lecture, 3.0 Lab

CREDIT HOURS: 3.0 Credits

RATIONALE FOR THE COURSE:

To help the student gain practical experience and working knowledge of the various techniques used to maintain the urban landscape. Students will learn the importance of site evaluation and proper species selection on the long-term success of any planted material in the landscape. Proper selection and care will limit maintenance costs and assure long lived plant material.

COURSE DESCRIPTION:

This course is a study of selection, installation, and maintenance of trees in the urban landscape. Emphasis will be placed on industry standards and municipality requirements. Topics also covered are basic tree anatomy and proper tree pruning and health management.

This course is a study of the three systems of estimating volumes and values of standing timber-strip, plot, and prism. Stand analysis, dominant tree data, and statistical data are also collected and analyzed.

PREREQUISITES/CO-REQUISITES:

Credit level <u>ENG 101</u> Minimum Grade of C or Credit level <u>ENG 101</u> Minimum Grade of TC or Credit level <u>ENG 155</u> Minimum Grade of C or Credit level <u>ENG 155</u> Minimum Grade of TC

*Online/Hybrid courses require students to complete the <u>DLi Orientation Video</u> prior to enrolling in an online course.

REQUIRED MATERIALS:

Please visit the <u>BOOKSTORE</u> online site for most current textbook information.

Enter the semester, course prefix, number and section when prompted and you will be linked to the correct textbook.

ADDITIONAL REQUIREMENTS:

SAFETY AWARENESS

Some laboratories are conducted outdoors in whole or in part, regardless of weather conditions. Appropriate clothing is required, including pants and boots. Please do not wear sandals, tennis-shoes, sneakers, crocs, flip-flops, slippers, etc. Appropriate protective clothing should be worn when inclement weather is anticipated. Students should consider raingear, jackets, and gloves. Because of the obvious health risks associated with exposure to inclement weather, the instructors reserve the right to dismiss any student who is not properly dressed from any lab period.

Being outdoors carries some additional risk. Always be aware of your surroundings. Pay special attention while crossing roads or examining trees near roads. Bees, wasps and yellow jackets, although not common, may be encountered during a lab. You may wish to inform your instructor of any allergies or other medical conditions that you may have. Poison-ivy will be present, so know what the species looks like. It is everyone's responsibility for keeping the class safe.

TECHNICAL REQUIREMENTS:

Access to Desire2Learn (D2L), HGTC's student portal for course materials. myHGTC and college email access.

CLASSROOM ETIQUETTE:

As a matter of courtesy to other students and your professor, please turn off cell phones and other communication/entertainment devices before class begins. If you are monitoring for an emergency, please notify your professor prior to class and switch cell phone ringers to vibrate.

NETIQUETTE: is the term commonly used to refer to conventions adopted by Internet users on the web, mailing lists, public forums, and in live chat focused on online communications etiquette. For more information regarding Netiquette expectations for distance learning courses, please visit <u>Online</u> <u>Netiquette</u>.

2022-2023

Part II: Student Learning Outcomes

COURSE LEARNING OUTCOMES and ASSESSMENTS*:

Module #1

Materials Covered: Value of Trees / Proper Tree Selection / Transplant Methods

*Assessment(s): Weekly skill based labs / Class review activity / Unit Test

Learning Outcomes:

- 1. List the benefits provided by trees to society and the environment.
- 2. Identify the factors that go into valuing a tree in an urban setting.
- 3. Identify the various industry trade organizations (arboriculture).
- 4. List the site factors to consider when selecting a tree species.
- 5. Explain what a cold hardiness zone is.
- 6. Identify the challenges posed to tree growth and development in urban environments.
- 7. Identify what are good tree selection characteristics based on need and site.
- 8. Identify the proper steps for a successful transplant (site preparation, season, nursery stock versus wilding, post-transplant watering, etc.).
- 9. Identify the criteria for tree protection devices (wraps, shelters, etc.).

Module #2Materials Covered:Fertilization / Pruning / Tree Preservation

*Assessment(s): Weekly skill based labs / Class review activity / Unit Test

Learning Outcomes:

- 1. Identify the nutritional needs of trees, shrubs and grass and fertilizers benefits and limitations.
- 2. Identify the impact of soil pH on tree and the common mineral deficiencies that exist.
- 3. Identify the sign of subnormal growth.
- 4. Be familiar with the results of a soil sample or foliar test.
- 5. Identify the benefits and weaknesses offered by Organic Concentrates, Bulk Organic Materials, and Commercial Fertilizers (dry, liquid and controlled release).
- 6. Identify the benefits associated with different pruning objectives: Training, Health (Insects & Disease problems) and Stability, Appearance, and Safety (ROW Clearance).
- 7. Identify proper pruning techniques and how the tree will react (healing).
- 8. Identify the benefits associated with different types of pruning: thinning, and heading cuts.
- 9. Identify the best time to prune for hardwoods and/or conifers; what tools to use in different situations and how to use them.
- 10. Be able to identify the risk factors associated with tree damage and how to address it.
- 11.Be able to identify the benefits associated with cabling, structural support (rod) and guying.
- 12. Identify the proper ways to work around root systems (access and compaction) and how to examine lightening damage.

Module #3 Materials Covered: Insects & Disease / Nonparasitic Factors

*Assessment(s): Weekly skill based labs / Class review activity / Unit Test

Learning Outcomes:

- 1. Identify the site and tree characteristics one must examine closely when evaluating a tree.
- 2. Identify diagnostic features ones should examine (leaves, bark, roots, trunk & branches) in an effort to identify the problem so proper treatment can be applied.
- 3. Be able to identify trees that may pose a public hazard to individuals or property.
- 4. Identify human or environmental activities that may pose a threat to tree health (construction, fill, changes in grade, soil compaction, girdling, sun scald, chemical, wildlife, pollution, etc.) and how to prevent them or lessen their impact.

Module #4 Insect & Mites / Diseases / Integrated Pest Mgt.

*Assessment(s): Weekly skill based labs / Class review activity / Unit Test

Learning Outcomes:

- 1. Be familiar with the structure of insects and other pests and their seasonal behaviors.
- 2. Be familiar with the damage caused by insects, such as, borers, leaf miners, caterpillars, sawflies, weevils, aphids, scales, and mites.)
- 3. Identify where on the tree key diseases attack (root, sapwood, heartwood, leaves, phloem, and cambium).
- 4. Be familiar with the damage caused by diseases, such as, virus, nematodes, parasitic plants, bacteria, and fungi.)
- 5. Identify the common methods used to deal with pest problems and their timing.
- 6. Identify the steps taken to conduct pest monitoring.
- 7. Identify the cultural steps taken to prevent or combat tree pest problems (sanitation).
- 8. Identify the physical and mechanical controls used to prevent or combat pest problems.
- 9. Describe the importance of parasites and predators in controlling pest populations.
- 10. Identify when it is beneficial to use insecticides to solve a pest problem, its timing, the proper application techniques and equipment and safety procedures.

*Students – please refer to the Instructor's Course Information sheet for specific information on assessments and due dates.

Part III: Grading and Assessment

EVALUATION OF REQUIRED COURSE MEASURES/ARTIFACTS*:

Students' performance will be assessed and the weight associated with the various measures/artifacts are listed below.

EVALUATION*

Tests	40%
Lab Reports, Field work & assign.	30%
Term paper	10%
Final Exam	20%
	100%

*Students, for the specific number and type of evaluations, please refer to the Instructor's Course Information Sheet.

GRADING SYSTEM:

Please note the College adheres to a 10 point grading scale A = 100 - 90, B = 89 - 80, C = 79 - 70, D = 69 - 60, F = 59 and below.

Grades earned in courses impact academic progression and financial aid status. Before withdrawing from a course, be sure to talk with your instructor and financial aid counselor about the implications of that course of action. Ds, Fs, Ws, WFs and Is also negatively impact academic progression and financial aid status.

The Add/Drop Period is the first 5 days of the semester for **full term** classes. Add/Drop periods are shorter for accelerated format courses. Please refer to the <u>academic calendar</u> for deadlines for add/drop. You must attend at least one meeting of all of your classes during that period. If you do not, you will be dropped from the course(s) and your Financial Aid will be reduced accordingly.

Part IV: Attendance

Horry-Georgetown Technical College maintains a general attendance policy requiring students to be present for a minimum of 80 percent (80%) of their classes in order to receive credit for any course. Due to the varied nature of courses taught at the college, some faculty may require up to 90 percent (90%) attendance. Pursuant to 34 Code of Federal Regulations 228.22 - Return to Title IV Funds, once a student has missed over 20% of the course or has missed two (2) consecutive weeks, the faculty is obligated to withdraw the student and a student may not be permitted to reenroll. **Instructors define absentee limits for their class at the beginning of each term; please refer to the Instructor Course Information Sheet.**

For online and hybrid courses, check your Instructor's Course Information Sheet for any required on-site meeting times. Please note, instructors may require tests to be taken at approved testing sites, and if you use a testing center other than those provided by HGTC, the center may charge a fee for its services.

Part V: Student Resources



THE STUDENT SUCCESS AND TUTORING CENTER (SSTC):

The SSTC offers to all students the following **<u>free</u>** resources:

- 1. Academic tutors for most subject areas, Writing Center support, and college success skills.
- 2. Online **tutoring** and academic support resources.
- 3. Professional and interpersonal communication **coaching** in the EPIC Labs.

Visit the <u>Student Success & Tutoring Center</u> website for more information. To schedule tutoring, contact the SSTC at sstc@hgtc.edu or self-schedule in the Penji iOS/Android app or at <u>www.penjiapp.com</u>. Email <u>sstc@hgtc.edu</u> or call SSTC Conway, 349-7872; SSTC Grand Strand, 477-2113; and SSTC Georgetown, 520-1455, or go to the <u>Online Resource Center</u> to access on-demand resources.



STUDENT INFORMATION CENTER: TECH Central

TECH Central offers to all students the following free resources:

- 1. **Getting around HGTC**: General information and guidance for enrollment, financial aid, registration, and payment plan support!
- 2. Use the <u>Online Resource Center (ORC</u>) including Office 365 support, password resets, and username information.
- 3. In-person workshops, online tutorials and more services are available in Desire2Learn, Student Portal, Degree Works, and Office 365.
- 4. Chat with our staff on TECH Talk, our live chat service. TECH Talk can be accessed on the student portal and on TECH Central's website, or by texting questions to (843) 375-8552.

Visit the <u>Tech Central</u> website for more information. Live Chat and Center locations are posted on the website. Or please call (843) 349 – TECH (8324), Option #1.

STUDENT TESTING:

Testing in an **online/hybrid** course may be accomplished in a variety of ways:

- Test administered within D2L
- Test administered in writing on paper
- Test administered through Publisher Platforms

Further more tests may have time limits and/or require a proctor.

Proctoring can be accomplished either face-to-face at an approved site or online through our online

proctoring service. To find out more about proctoring services, please visit the <u>Online Testing</u> section of the HGTC's Testing Center webpage.

The Instructor Information Sheet will have more details on test requirements for your course.

DISABILITY SERVICES:

HGTC is committed to providing an accessible environment for students with disabilities. Inquiries may be directed to HGTC's <u>Accessibility and Disability Service webpage</u>. The Accessibility and Disability staff will review documentation of the student's disability and, in a confidential setting with the student, develop an educational accommodation plan.

Note: It is the student's responsibility to self-identify as needing accommodations and to provide acceptable documentation. After a student has self-identified and submitted documentation of a disability, accommodations may be determined, accepted, and provided.

STATEMENT OF EQUAL OPPORTUNITY/NON-DISCRIMINATION STATEMENT:

Horry-Georgetown Technical College prohibits discrimination and harassment, including sexual harassment and abuse, on the basis of race, color, sex, national or ethnic origin, age, religion, disability, marital or family status, veteran status, political ideas, sexual orientation, gender identity, or pregnancy, childbirth, or related medical conditions, including, but not limited to, lactation in educational programs and/or activities.

TITLE IX REQUIREMENTS:

All students (as well as other persons) at Horry-Georgetown Technical College are protected by Title IX—regardless of their sex, sexual orientation, gender identity, part- or full-time status, disability, race, or national origin—in all aspects of educational programs and activities. Any student, or other member of the college community, who believes that he/she is or has been a victim of sexual harassment or sexual violence may file a report with the college's Chief Student Services Officer, campus law enforcement, or with the college's Title IX Coordinator, or designee.

*Faculty and Staff are required to report incidents to the Title IX Coordinators when involving students. The only HGTC employees exempt from mandatory reporting are licensed mental health professionals (only as part of their job description such as counseling services).

INQUIRIES REGARDING THE NON-DISCRIMINATION/TITLE IX POLICIES:

Student and prospective student inquiries concerning Section 504, Title II, and Title IX and their application to the College or any student decision may be directed to the Vice President for Student Affairs.

Dr. Melissa Batten, VP Student Affairs Title IX Coordinator Building 1100, Room 107A, Conway Campus PO Box 261966, Conway, SC 29528-6066 843-349-5228 Melissa.Batten@hgtc.edu **Employee and applicant** inquiries concerning Section 504, Title II, and Title IX and their application to the College may be directed to the Vice President for Human Resources.

Jacquelyne Snyder, VP Human Resources EEO and Title IX Coordinator Building 200, Room 212A, Conway Campus PO Box 261966, Conway, SC 29528-6066 843-349-5212 Jacquelyne.Snyder@hgtc.edu